

## SEQUENCE LISTING

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NOV 14 2002  
TECH CENTER 1600/2900

<110> Sakowicz, Roman  
Goldstein, Lawrence S. B.  
The Regents of the University of California

<120> Identification and Expression of a Novel Kinesin Motor Protein

<130> 18557C-000710US

<140> US 09/235,416  
<141> 1999-01-22

<150> WO PCT/US99/01355  
<151> 1999-01-22

<150> US 60/072,361  
<151> 1998-01-23

<160> 7

<170> PatentIn Ver. 2.0

<210> 1  
<211> 784  
<212> PRT  
<213> Thermomyces lanuginosus

<220>  
<223> TL-gamma ATP-dependent plus end-directed microtubule motor protein

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<223> kinesin-like microtubule motor domain

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<222> (358)..(442)  
<223> neck domain links motor domain to stalk domain

<220>  
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<223> stalk domain, unc-104 family domain

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①

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 Arg Lys Ser Gly Lys Thr Ile Met Asp Gly Pro Lys Ala Phe Ala Phe  
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 Asp Arg Ser Tyr Trp Ser Phe Asp Lys Asn Ala Pro Asn Tyr Ala Arg  
 65 70 75 80  
 Gln Glu Asp Leu Phe Gln Asp Leu Gly Val Pro Leu Leu Asp Asn Ala  
 85 90 95  
 Phe Lys Gly Tyr Asn Asn Cys Ile Phe Ala Tyr Gly Gln Thr Gly Ser  
 100 105 110  
 Gly Lys Ser Tyr Ser Met Met Gly Tyr Gly Lys Glu His Gly Val Ile  
 115 120 125  
 Pro Arg Ile Cys Gln Asp Met Phe Arg Arg Ile Asn Glu Leu Gln Lys  
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 Asp Lys Asn Leu Thr Cys Thr Val Glu Val Ser Tyr Leu Glu Ile Tyr  
 145 150 155 160  
 Asn Glu Arg Val Arg Asp Leu Leu Asn Pro Ser Thr Lys Gly Asn Leu  
 165 170 175  
 Lys Val Arg Glu His Pro Ser Thr Gly Pro Tyr Val Glu Asp Leu Ala  
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 Lys Leu Val Val Arg Ser Phe Gln Glu Ile Glu Asn Leu Met Asp Glu  
 195 200 205  
 Gly Asn Lys Ala Arg Thr Val Ala Ala Thr Asn Met Asn Glu Thr Ser  
 210 215 220  
 Ser Arg Ser His Ala Val Phe Thr Leu Thr Leu Thr Gln Lys Trp His  
 225 230 235 240  
 Asp Glu Glu Thr Lys Met Asp Thr Glu Lys Val Ala Lys Ile Ser Leu  
 245 250 255  
 Val Asp Leu Ala Gly Ser Glu Arg Ala Thr Ser Thr Gly Ala Thr Gly  
 260 265 270  
 Ala Arg Leu Lys Glu Gly Ala Glu Ile Asn Arg Ser Leu Ser Thr Leu  
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 325 330 335  
 Ser Pro Ala Asp Ile Asn Phe Glu Glu Thr Leu Ser Thr Leu Arg Tyr  
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Ser Lys Ala Glu Ile Val Glu Gln Leu Asn Gln Ser Glu Lys Leu Tyr  
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Ala Val Met Val Asn Gly Val Arg Ile Asp Lys Pro Thr Arg Leu Arg  
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<212> DNA

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ccaggcgcgc acgaccggac actgagcaag gcgggttcgg atgcggacgg cgattctcgc 1920
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C1

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